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## (12) United States Patent

Doczy et al.

# (54) INSTRUMENT-ACTIVATED SUB-SURFACE COMPUTER BUTTONS AND SYSTEM AND METHOD INCORPORATING SAME

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### (57) ABSTRACT

The present technique provides a system and method for providing instrument-activated buttons having a sub-surface mechanism for triggering a desired function upon interaction with an above-surface electronic/digital user device, such as a digitizing pointing device. The instrument-activated buttons may be disposed in a display device, a tablet computing device, or any other suitable electronic device. A user navigates a housing surface of the electronic device until a signal identifies the sub-surface button, which may then be activated by performing an instrument-based activation event. The activation event may be a button click, a tip movement, or any other suitable trigger on the electronic/digital user device. A wireless communication is then transmitted between the subsurface mechanism and the electronic/digital user device to initiate the function associated with the instrument-activated button.

#### 17 Claims, 24 Drawing Sheets

